INSTITUTIONAL AGRICULTURE FINANCE IN UTTAR PRADESH: A STUDY OF AGRA DISTRICT

A

Synopsis

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Contents

Sl. No.	Particulars	Page No.
1	Introduction	1-3
2	Review of Literature	4-11
3	Motivation and Need of the Study	12
4	Objectives of the Study	12
5	Research Methodology	12-15
6	Proposed Plan of Study	15
7	References & Bibliography	15-19

1. Introduction

In India the role of Agriculture is very important; in the other sense Agriculture performs most important part in Indian Economy. Agriculture still remains the backbone of our Indian economy. It is reported that the role of Agriculture affects about 14% of the Gross Domestic Product (GDP) and about 2/3rd population of India depend on the Agriculture.

After two years of back-to-back poor monsoons and drought conditions in several parts of the country, Agriculture in India picked up momentum during 2016-17, due to normal monsoon rains. Agriculture provides employment to about 48.9% of the total workforce in India, but contributes only 15.2% to the country's Gross Value Added (GVA). About 85% of operational holdings in the country are in the small and marginal categories, and the average size of an operational holding is only 1.15 hectares.

Table 1: Sector-wise Growth Rate (%) of GVA at BP at Constant (2011-12) Prices

Sectors	2012-13	2013-14	2014-15	2015-16	2016-17 (PE)
Agriculture	1.5	5.6	0.2	0.7	4.9
Industry	3.3	3.8	7.5	8.8	4.9
Services	8.3	7.7	9.7	9.7	7.7

Note: PE – Provisional Estimates.

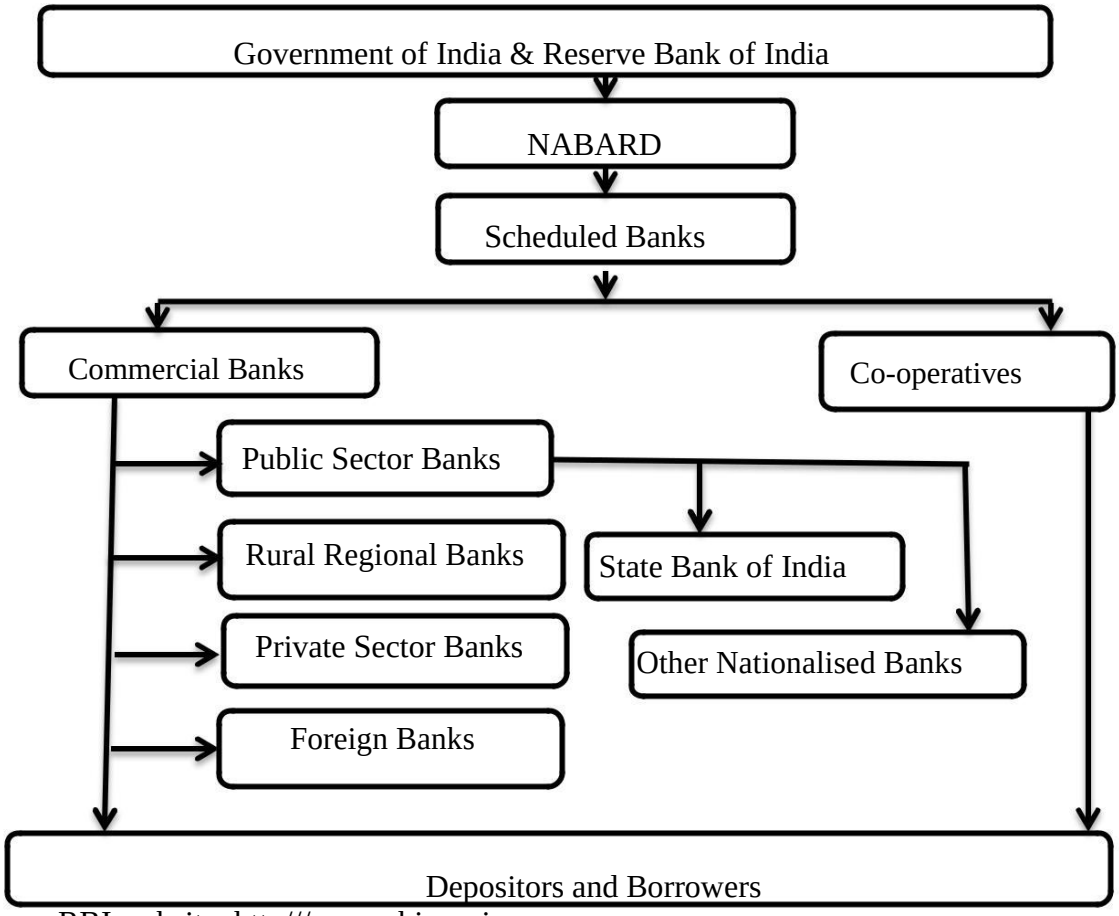
Sources: (1) Key Economic Indicators, June 2017, Ministry of Commerce and Industry, Govt. of India (2) Provisional estimates of National Income 2016-17, CSO, Ministry of Statistics and Programming Implementation, Govt. of India.

Agriculture Finance is the study of financing and liquidity services credit provides to farm borrowers. It is also considered as the study of those financial intermediaries who provide loan funds to Agriculture and the financial markets in which these intermediaries obtain their loan able funds." Finance in Agriculture is as important as other inputs being used in Agriculture production. Technical inputs can be purchased and used by farmer only if he has money (funds). But his own money is always inadequate and he needs outside Finance or credit. Agriculture Finance capitalizes farmers to undertake new investments and/or adopt new technologies. The following factors are responsible for the need of credit in Indian Agriculture- low income of

farmers, uncertain income, increase in expenditure, typical production pattern, inability to raise funds from other sources. Realizing the importance of Agriculture credit in fostering Agriculture growth and development, the emphasis on the Institutional framework for Agriculture credit is being emphasized since the beginning of planned development era in India.

A large number of formal Institutional agencies like Scheduled Commercial Banks (SCBs), Co-operatives Banks, Regional Rural Banks (RRBs), Non– Banking Financial Institutions (NBFIs), and Self-help Groups (SHGs), etc. are involved in meeting the short and long-term needs of the farmers. Several initiatives have been taken to strengthen the Institutional mechanism of rural credit system. The main objective of these initiatives is to improve farmers' access to Institutional credit. There are various sources from which the farmers can raise funds needed for farming. These sources are classified into two categories.

1. Non-Institutional Sources. Non-Institutional Sources are as followings: Moneylenders: Agriculture and Professional, Landlords, Traders and Commission agents, Friends and Relatives and Others.
2. Institutional Sources.



Source: RBI website: http///www.rbi.org.in

Table 2: Agency-Wise Ground-Level Credit Flow					
					(Amount in Rs. Crore)
Agency	**2012-13**	**2013-14**	**2014-15**	**2015-16 (PE)**	**2016-17* (PE)**
CBs	4,32,491	5,27,506	6,04,376	6,42,954	7,33,201
RRBs	63,681	82,653	1,02,483	1,19,261	1,03,974
COOPS	1,11,203	1,19,964	1,38,469	1,53,295	1,22,651
Total	**6,07,375**	**7,30,123**	**8,45,328**	**9,15,510**	**9,59,826**

Note: CBs – Commercial Banks; RRBs – Regional Rural Banks; Coops – Cooperative Banks

Source: *Provisional (as on 28 February 2017) as reported by concerned banks in ENSURE portal of NABARD. Data on Agriculture term loan include Agriculture and agro-allied, agro-infra and ancillary activities. Out of total term loan disbursement, share of Indirect Term Loan is Rs. 1, 27,070.52 Crore (not given to non-corporate farmers as per definition of RBI).

Uttar Pradesh has 2, 04, 03,000 hectares irrigated land and In India it is 9, 57, 72,000 hectares. The state has the potential to double its agro-growth from the present 2.5% to 5% per annum. Presently, this most populous state of India has 59% of its workforce engaged in Agriculture, as per Census 2011, but with an average holding size of just 0.76 hectares and predominance of small and marginal holdings. 29% of its population was below the poverty line in 2011-12. As per the Situation Assessment Survey of NSS (2012-13), average monthly income of an agro-household in UP was the third lowest in the country.

Agra has a rich historical background, famous for Taj Mahal, Red Fort and Petha (A Sweet). It comprises 6 Sub-Districts and 15 Blocks with the total population of 44, 18,797 out of which 2, 48,151 are Cultivators. Net sown area of the District is 2, 87,294 hectares constituting 72% of the net geographical area. The net irrigated area is 2, 36,376 hectares, of which 90% and 8% are irrigated by wells/tube wells and canals respectively. The cropping intensity of the District works out to 145%. State Horticulture mission has included Agra District for promotion of commercial cultivation, rejuvenation, post-harvest management and marketing of Mango, Aonla, Guava and Tuberose.

2. Review of Literature

2.1. Present State of Knowledge

The literature investigating Institutional Agriculture Finance is increasing after nationalisation of banks (1969 & 1980).

Recent research provides evidence of the influence of the Institutional Agriculture Finance over farmers' need.

The following studies have been taken into consideration to find out research gaps and justify the need of proposed study.

Review of Literature (National)

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
1	Aug. 2017	ICRTESM-17, ISBN: 978-93-86171-56-6	Sadhik. Sayyed, Noorbasha	Lead Bank and Lead Bank Scheme –India	This study is mainly confined to the lead bank scheme in Andhra Pradesh State Districts only and focuses on lead bank activities in the present day.	The role of LBS is useful for the development of the economy especially in the backward area; it acts as to co-ordinate the efforts of all other Commercial Banks, financial Institutions and other development agencies for bringing about the overall development of the Districts.
2	Aug. 2017	International Journal Of Engineering Sciences & Research Technology ISSN: 2277-9655 Value: 3.00 CODEN: IJESS7	Ajit Kumar Mishra and Upasana Mohapatra	Agriculture Finance in India- An Overview	The paper discusses the history and need of Agriculture Finance in India, sources and magnitude of Agriculture Finance and assesses its progress.	It revealed that the Institutional credit flow to the Agriculture has been increasing for the past four decades. The structure of the sources of credit has witnessed a clear shift and commercial banks have emerged as the major source of Institutional credit to Agriculture in the recent years imparting training to borrowers regarding procedural formalities of financial Institutions could be helpful in increasing their access to Institutional credit.

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
3	Mar. 2017	International Res. J. Agro. Eco. & Stats.Vol.8 Issue 1 ISSN- 2231-6434I	Venkateswarlu Yerukala	Smallholder farmers: Agriculture credit in India performance and challenges.	To analyse and assess Agriculture Credit Policy in India at macro level and study the issues and challenges associated with Agriculture credit towards smallholder farmers.	Smallholder farmers live in most vulnerable conditions. Despite having the knowledge of exploitation of money lenders, prevailing difficult situations of their lives are enforcing them to barrow money for high rate of interests from money lenders Policies have played negligible role towards development of smallholder farmers.
4	June 2016	SOPAAN-II Volume 1, Issue 1,	Tajinder Kaur	Role of NABARD in Rural Development	The paper attempts to analyse the role of NABARD and its functioning in development of rural India.	NABARD is working for the 360 degree development of rural India. Every year the financial assistance received by NABARD and the disbursement made out of it are increasing. In short it can be said that the NABARD is providing rural India all round assistance and proved to be an institution where "Growth with social justice exist.
5	Apr. 2016	ANMR Journal of Research in Com. & Mgmt. Vol. 5, Issue 4 ISSN-2277-1166	Rajiben Solanki	A Study of Agriculture Finance by Commercial Banks In India: A Case Study of Central Bank of India.	To understand the concept of Agriculture Finance, to examining the volume and trend of Agriculture Finance provide by selected bank and to analyse the disbursement of Agriculture credit by the commercial banks.	The study reveals that the bank credit in India to Agriculture sector has been increased in its quantum during the study period. The credit provided by the bank has increased its advances. But an effort has to be taken by bank to reduce its outstanding, so that the recovered bank credit should be pumped in to Agriculture sector further for its growth.
6	2016	Imperial Journal of Interdisciplinary Research (IJIR) Vol-2,Issue-10 ISSN: 2454-1362	K. Swamy Nath	Review of Agriculture Credit Committees and Policy in India since Pre and Post Independent Period.	To study Agriculture credit committees and policy pre and post independent in India.	The present credit structure is a result of several recommendations of several expert committees to improve the rural credit delivery. While it has made a long journey in evolving a credit structure, by learning lot of lessons, the problem of effective credit delivery to all farmers still seem to be elusive.

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
7	Dec. 2015	National Journal of Commerce and Management, ISSN: 2394-6342 Vol2, Issue 1	Varun Saini	Performance of Lead Bank Scheme (PNB) in Mandi District of Himachal Pradesh	To study the contribution of financial inclusion under Lead Bank Scheme, the distribution of loans amount among various sectors in District Mandi	There is a positive impact on social and economic status of rural households under the financial inclusion. Therefore, considering the positive change at the gross root levels of rural households on account of financial inclusion, Govt. of India and RBI may take further initiative to implement Jan- Dhan Yojana mission efficiently and effectively to reach the unreached.
8	June 2015	Research Front ISSN (Print) 2320–6446, (Online) 2320– 8341 Impact Factor–1.115, Vol. 3 No. 2	Sharmishtha Matkar, Anil Keshav Jadhao	Agriculture Credit in India: Status and Problems	In this research paper Researchers focused on Indian Agriculture credit and credit issues and challenges.	The credit delivery to the Agriculture sector continues to be inadequate. It appears that the banking system is still hesitant on various grounds to purvey credit to small and marginal farmers. The situation calls for concerted efforts to augment the flow of credit to Agriculture, alongside exploring new innovations in product design and methods of delivery, through better use of technology and related processes.
9	2014	Ph.D. Thesis Uploaded at Website-Shodhganga.inflibnet.ac.in	Girjia V Aounti	Institutional Finance to Agriculture in Backward Region: Comparative Study on CBs and Cooperative Banks in Gulbarga District.	To examine the availability of Institutional credit and to make a comparative analysis of CBs and Cooperative Banks in providing Agriculture Finance and to study the repayment performance of the borrowers of both banks, to identify characteristics of defaulters and probable causes of default.	The performance of branches of CBs is better than of PAs, in respect of deposit mobilization and owned capital. The CBs are the main source of term loan as well as total Agriculture loan in the District. The misuse of Agriculture credit is high due to poverty and lack of supervision of credit. The average recovery percentage Agriculture loans of CBs were the higher as comparative to that of Cooperative Banks.

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
10	2014	ELK Asia Pacific Journals– Special Issue ISBN: 978-81-930411-0-9	Dhirendra Ojha	Role of Banking Sector in Development of Indian Agriculture with Special Reference to Satna District.	To bring into light about the importance of banking sector specially the importance of regional rural banks which play an important role in providing Agriculture credit and to remove them from the clutches of local moneylenders.	The financial Institutions providing loans for the purpose of Agriculture turned out to be total failure. Although there is a slight improvement in the condition of workers but the overall position is that the financial Institutions do not serve the purpose of Agriculture. Therefore the Agriculture sector is lagging behind and due to it the economic growth of the country is also back ward since Indian economy is an Agriculture economy and if the condition of Agriculture economy will not improve it will definitely affect the Indian Economy and its growth.
11	Sep. 2013	Ph.D. Thesis (628) Uploaded at Website-Shodhganga.inflibnet.ac.in	Antony M.P.	Institutional Financing of Agriculture in Kerala	To examine the trends and pattern of Agriculture financing and the intra and interregional variations in demand and supply of Agriculture credit, to estimate the demand for and supply of Agriculture credit, to examine the impact of Institutional flow of Agriculture credit on production, employment, income etc. to identify the operational problem in relation to the flow of Agriculture credit.	It was observed that credit flow to Agriculture has decelerated in the post reform period. The orientation of the Agriculture credit policy has to be changed. The lending fatigue in Agriculture and the policy induced preference on the part of the Institutional agencies, especially commercial banks to invest their resources in risk free and zero transaction cost avenues like Rural Infrastructure Development Fund being banking by proxy' has to be discouraged.

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
12	Nov. 2012	Hind Agriculture Research And Training Institute, Volume 7 | Issue 3 & 4 & | 398-400A	Rajesh Rai And J. Rai	Role of the lead bank (UBI) in Agriculture development of District Jaunpur (U.P.)	To study the knowledge, skill and attitude of the respondents towards the adoption of the modern farm technology and credit utilization, extent of adoption of modern technology and to examine the constraints in financing.	Majority of farmers have taken the credit for Agriculture purpose, the cropping intensity increased after credit utilization by using of modern farm technology and high yielding varieties and irrigation facilities as well as subsidiary enterprises like livestock production and dairy enhanced the income and employment opportunity in the District through credit utilization.
13	2012	National Monthly Refereed Journal Of Research In Commerce & Management, V.1, I. 6, ISSN 2277-1166	A. Surendran and Dr. B. Manoharan	Performance of Lead Bank Scheme in Virudhunagar District of Tamilnadu	The study mainly focuses on the" Lead Bank Scheme in Virudhunagar District" and evaluates the sector-wise contribution of commercial banks and Indian Overseas Bank set by the District Credit loans.	An integrated approach is required on the part of Lead Bank as a consortium leader with regard to assessing the potentiality of the District and meeting out the credit needs of the target groups. The shortfall noted in the operation and preparation of DCPs should be overcome through useful and realistic approach. Although the performance of Lead Bank in respect of overdue is satisfactory.
14	Nov 2010	Ph.D. Thesis uploaded at website- www.shodhganga .inflibnet.ac.in	John K. Mathew	A Study on Agriculture Financing by Commercial Banks in Kerala	Objective of the study is to examine the perceptions of Agriculture loan borrowers on accessing the credit extended by the commercial banks in Kerala.	Researcher found that the impact of Agriculture credit which is provided by the Commercial Banks is very suitable, they want to say no to moneylenders and say yes to Commercial banks. But in this process banks faces multitude of problems regarding disbursement of loan and recovery issues.
15	July 2010	Ph.D. Thesis (54296) uploaded at website- www.shodhganga.infl ibnet.ac.in	K. Alagarsamy	The Role of Commercial Banks in Providing Agriculture Credit - A Study with Reference to Virudhunagar District in Tamil Nadu	Objective is to study the trend and growth of the loans issued, recoveries of loans, outstanding loans and overdue of commercial banks in the Virudhunagar District.	It revealed that the marginal farmers had performed well not only in the prudent investment they had made on the financial and physical assets, but also in the better and more efficient utilization of factors and inputs in the study area. Commercial bank credit, promoted Agriculture inputs to meet their various day-to-day Agriculture expenses and recovery position is good.

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
16	Sep 2009	Ph.D. Thesis (4840) uploaded at website-www.shodhganga .inflibnet.ac.in	G.Kalaichelvi	A Study on Agriculture Finance With Special Reference to Lending and Recovery by Commercial Banks in Tiruchirappalli District, Tamil Nadu, South India.	Objective of the study is to assess the performance and to analyse the farm credit over dues of the Commercial banks.	It revealed that the overdue position is very bad among all the credit Institutions in the formal sector because of poor loan recovery were largely attributed to lack of sufficient field staff to ensure follow-up after the sanction of loan and absence of statutory powers to induce prompt repayment by the borrowers as far as the banks are concerned and Secondly crop failure. If crop give adequate income, farmers prefer to repay of Money lenders instead of bank loans. Government waiving policy farmers make lenient to repay.
17	Aug 2009	Reserve Bank Of India www.rbi.org.in	Usha Thorat (Chairperson)	Report of the High Level Committee to review Lead Bank Scheme	Its original objective of bringing about overall improvements in branch expansion, mobilization of deposits and lending to the priority sectors, especially in rural/semi urban areas.	The LBS is useful and needs to be continued. The SLBC and various for a under LBS should focus on addressing the 'enablers' and 'impeders' in achieving greater financial inclusion and flow of credit to priority sectors, while continuing to monitor subsidy linked government sponsored schemes.
18	July 2006	Ph.D. Thesis uploaded at website-www.shodhganga.inflibnet.ac.in	K. Venu Madhava Rao	Agriculture Credit: A Case Study of Krishna District, A.P.	Objective of the study is to examine the Agriculture credit system in India and the Institutional and non-Institutional credit system in Krishna District through a sample survey.	It is observed that among all the Institutional agencies financing Agriculture Commercial Banks perform major role and primary Agriculture credit societies and that of RRBs are meagre. Farmers prefer to get Institutional Finance.

Review of Literature (International)

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
1	June 2016	International Journal of Ecology and Development Research pp. 010-015.	Md. Nazirul Islam Sarker	Role of Banks on Agriculture Development in Bangladesh.	The aim of this study is to determine the role of banks on Agriculture development.	The result indicates that bank plays on a significant role on Agriculture development in Bangladesh. Timely flow of Agriculture credit can meet farmers demand to ensure Agriculture productivity.
2	Nov 2015	International Journal of Academic Research in Business and Social Sciences, Vol. 5, No. 11 ISSN: 2222-6990	Agunuwa, Ekokotu Vincent, Inaya, Lucky, Proso, Timothy	Impact of Commercial Banks' Credit on Agriculture Productivity in Nigeria (Time Series Analysis 1980 - 2013).	The aim of the study is to examine the impact of commercial banks' credits on Agriculture productivity in Nigeria.	The study reveals that the discovery of crude oil has led to the neglect of the Agriculture sector in Nigeria, which in turn has resulted in acute shortage of supply of food stuffs, industrial raw materials, and has brought about high level of importation of these commodities, thereby increasing cost of living drastically.
3	Nov 2014	Nepal Rastra Bank Banking Dev. And Research Unit Dhangadhi Office	Gunakar Bhatta	Agriculture Credit and its Impact on Farm Productivity: A Case Study of Kailali District	The aim of the study is to analyse the structure and trend of Agriculture credit in Kailali District during the recent years.	The study reveals the need for easing the access to Agriculture credit, reducing the credit interest rate and extending the formal financial intermediation in the rural areas of the District. Easier access to credit will ultimately contribute to Higher productivity of the farmers enabling them to attain higher technical efficiency.
4	2009	Pakistan Vet. J., 29(2): 81-84.	Abedullah, N. ahmood, M. Khalid And S.Kouser	The Role of Agriculture Credit in the Growth of Livestock Sector: A Case Study of Faisalabad	The objective of the present study was to assess the role of credit in the growth of livestock sector and to estimate its efficiency in the contribution of farmers' income.	It was observed that credit availability expanded the livestock sector more than double, which increased family income per month from livestock sector. The elasticity of family size was highest, followed by credit and literacy rate, indicating that adequate potential exists that can be explored to utilize unemployed and untrained rural labour in the Agriculture sector.

S. No.	Year	Publication Details	Authors	Title	Objectives	Conclusions
5	2008	Pak. J. life soc. sci., 6(1): 47-49	Moh Khalid Bashir, Mod Masood Azeem	Agriculture Credit in Pakistan: Constraints and Options.	The current study was designed to investigate the problems faced by the farmers while getting the loan.	It was found that the small farmers faced a lot of problems in getting and returning the loan which must be removed to get better results and hence improving the quality and quantity of the Agriculture products.
6	May 1982	PIDS staff paper series;8202	Crientna C. David	Credit And Price Policies In Philippine Agriculture	The purpose of this paper is to analyse how credit policies in the Philippines are related to economic incentives in Agriculture and to analyse the element to which cheap credit is an effective way to offset various taxes on Agriculture.	In summary, interest rate subsidies have not significantly altered the unfavourable economic incentives in Agriculture caused by Government Policies. It is not surprising, therefore, that loanable funds to Agriculture in real terms have declined despite government instituted credit quotas and special credit programs.

2.2. Research Gap

On the basis of review the following gaps have been found.

a) No Researcher calculated trend of Institutional Agriculture Finance in Uttar Pradesh.

b) The Researcher fails to find any study where the perceptions of the farmers regarding Institutional Agriculture Finance

c) No study has been found where the change in economic conditions of farmers, studied after waiving schemes of Agriculture crop loans.

d) There is no study in which the changes in farmers' income have been studied after Institutional Agriculture Finance.

3. Motivation and Need of the Study

The farmers are facing different types of problems in cultivation. It will be highlighted the issues of Institutional Agriculture Finance and also explored the status of Institutional Agriculture Finance. Govt. of India has decided to enhance farmers' income up to double.

After a long time, a study of Institutional Agriculture Finance is going to be held in Agra District of Uttar Pradesh. The number of farmers is decreasing continuously. So it is a great need to conduct research in this evolutionary area especially in Indian scenario as it's an emerging problem in recent time. This study will be found out new trend of Agriculture Finance, Schemes to farmers related to innovative farming practices and technologies in cultivation. To the best of the Researcher's Knowledge, this will be pioneered qualitative, quantitative research on Institutional Agriculture Finance.

4. Objectives of the Study

1. To study the Institutional framework and schemes for Agriculture Finance.
2. To study the present position of Institutional Agriculture Finance flow.
3. To study the perception of the farmers regarding Institutional Agriculture Finance.
4. To analyse the performance of Institutions towards Agriculture Finance.
5. To measure the impact of Institutional Agriculture Finance on production, employment and farmers' income.
6. To propose a model for effective Institutional Agriculture Finance management.

5. Research Methodology

To accomplish the objectives of the study, the following specific research methodology is proposed:

1. The Institutional Regulatory Framework and Schemes for Agriculture Finance will be studied by using secondary information issued by RBI, NABARD, Government of India and other respective institutions. Any new guidelines comes out during the course of study will also be considered.
2. The present position of Institutional Agriculture Finance flow will be studied by using secondary information issued by respective institutions. The secondary information will be analysed by using trend analysis.
3. To study the perceptions of the farmers regarding Institutional Agriculture Finance, the Researcher will collect primary information by executing well-structured questionnaires, schedules and personal interviews to 500 respondents of selected villages of Agra district. The information will be analysed by using simple statistical tools.
4. The performance of Institutions towards Agriculture Finance will be analysed by using appropriate test of significance.
5. The impact of Institutional Agriculture Finance on production, employment and farmers' income will be measured by using secondary and primary data. The data will be analysed by using regression and correlation methods.
6. Based on the findings of the study, the researcher will propose a model for effective Institutional Agriculture Finance management.

5.1. Research Design

The proposed research shall aim at exploring the theoretical aspects of Institutional Agriculture Finance, for which the qualitative as well as quantitative information shall be collected to meet the objectives of present research. So the proposed research design shall be exploratory, descriptive and analytical.

5.2. Scope of the Study

The proposed study shall include farmers and Institutions providing Agriculture Finance in Agra District of Uttar Pradesh for the purpose of conducting the study. For the purpose of study, a period of fourteen Financial Years from 2004-05 to 2017-18 will be taken into consideration.

5.3. Data Collection

The relevant data will be collected from both secondary and primary sources.

a) **Primary Data**

The primary data will be collected through administration of well-structured questionnaire, scheduled interview and data shall be collected both from the farmers as well as the officials of respective Institutions from the selected study area. The selective criteria shall be used for the selection of respondents from the farming community of Agra District. The proposed criteria of respondents' selections shall be as stated below:

i. Those farmers who hold own Agriculture land.
ii. Those farmers who hold Kisan Credit Card (KCC).
iii. Those farmers who hold term loan.
iv. Other Govt. operated financial schemes hold farmers.
v. Respective Institutions of Agra District.

The selection of study sample for the proposed research work is done on the basis of Multi-Stage Sampling followed by Convenience and Judgmental Sampling. The process of study sample selection is depicted through table 4. The Sample size for the proposed study is 600 respondents comprising of 500 farmers and 100 officials from respective Institutions in study area. The stage-wise selection of study sample is based on the judgmental evaluation of statistical data related to the cultivators in India, Uttar

Pradesh as well as Agra District (Table no. 4, 5 and 6 respectively, see table in appendix).

b) Secondary Data

- Duration: Annual data series spanning from 2004-05 to 2017-18.
- Sources: Published Annual Reports of RBI, NABARD, Lead Bank and Govt. of India Publications relevant to the proposed research work and other respective Institutions available on websites or hard copies. The various other secondary sources like reputed Journals and Magazines, Periodicals and Newspapers etc. shall also be considered.

5.4. Statistical and Econometric Tools

Data analysis of the proposed study shall be carried out through the use of some select Statistical and Econometric tools such as descriptive statistic, Regression Analysis, Unit Root Test, Granger Causality, VAR Model and Panel Model, Correlation, ANOVA, MANOVA, Test of significance, Chi-square test, Content Analysis or statistical software like SPSS and E-Views.

6. Proposed Chapter Plan

Sl. No.	Particulars
CHAPTER-1	Introduction.
CHAPTER-2	Review of Literature and Research Methodology.
CHAPTER-3	Farmers' perception towards Institutional Agriculture Finance.
CHAPTER-4	Performance of Institutions regarding Agriculture Finance.
CHAPTER-5	Impact of Institutional Agriculture Finance.
CHAPTER-6	Conclusion and Suggestions.

Appendix: Table 3: Study Sample Selection Procedure

Stage-1	Study Population (population of Cultivators in India, Table- 4)
Stage-2	Study Sample Frame (Uttar Pradesh) based on maximum percentage of cultivators in Uttar Pradesh in comparison to cultivators in India, Table- 4
Stage-3	Study Sample Area (Agra) based on Convenience Sampling, Table- 5
Stage-4	Study Sample Unit (15 Blocks of Agra District) based on Judgmental Sampling, Table- 6
Stage-5	Study Sample composition (Farmers and Officials of Agriculture Finance Institutions)
Stage-6	Sample Size- 600 (500 farmers from 15 Blocks and 100 Officials of Agriculture Finance Institutions)

Table 4: Cultivators' Population of Top 5 States of India

Sl. No.	State	Population of cultivators	% of India's Cultivators	Total population	% of India's population
1	**Uttar Pradesh**	**1,55,76,415**	**16.23%**	**19,98,12,341**	**16.50 %**
2	Maharashtra	1,14,78,075	11.96 %	11,23,74,333	9.28 %
3	Rajasthan	98,45,353	10.23 %	6,85,48,437	5.66 %
4	Madhya Pradesh	82,14,993	8.56 %	7,26,26,809	5.99 %
5	Karnataka*	60,38,309	6.29 %	6,10,95,297	5.04 %
6	Other States	4,47,89,268	46.68 %	69,61,12,320	57.50 %
Total	**India**	**9,59,42,413**	**100 %**	**1,21,05,69,573**	**100 %**

Source: Census 2011, Govt. of India

***:** according to Census 2011, Andhra Pradesh has 60,87,607 number of cultivators; at present Andhra Pradesh has been divided into two states i.e. Andhra Pradesh and Telangana respectively form June 2014. So Karnataka has 5th position. There is some difference in percentage because of decimal figure.

The sample for proposed study is drawn from a defined universe that is cultivators' population in India. The selection of study sample is made on the basis of judgemental sampling. Uttar Pradesh is selected as a sample area for the purpose of conducting the present study, as it has maximum percentage of cultivators' population in India.

Table 5: Top 10 maximum population holding Districts that hold maximum percentage of cultivators of its total population

Percentage of cultivators' population of top 10 highest holding populations' district

S. No.	District	Total Population	Total population of Cultivators	Percentage of cultivators' population of its total population
1	Sitapur	44,83,992	5,01,124	11.17 %
2	Jaunpur	44,94,204	3,86,912	8.60 %
3	Bareilly	44,48,359	3,23,067	7.26 %
4	Moradabad	47,72,006	3,27,075	6.85 %
5	Azamgarh	46,13,913	3,11,060	6.74 %
6	Allahabad	59,54,391	3,37,502	5.66 %
7	**Agra**	**44,18,797**	**2,48,151**	**5.61%**
8	Gorakhpur	44,40,895	1,74,804	3.93%
9	Kanpur Nagar	45,51,268	1,74,576	3.81%
10	Ghaziabad	46,81,645	1,39,829	2.98%

Source: Census 2011, Govt. of India.

In the above stated table there are top 10 districts which have highest population in Uttar Pradesh and holding the highest percentage of cultivators' of its District's

population. So Researcher has selected Agra District as research area on the basis of convenience Sampling.

Table 6: Tehsil-Wise and Block-Wise Population of Cultivators of Agra District

Tehsil Name	Tehsil Wise Total Population	Tehsil Wise Total Cultivator	Percentage of Total Agra's Cultivators	Block Name	Block Wise Population	Block Wise Total Cultivators	Percentage of Total Cultivators of Block
Bah	4,30,523	54,702	22.04 %	**Bah**	1,47,452	18,048	12.23 %
				Jaitpur Kalan	1,21,983	17,383	14.25 %
				Pinahat	1,26,168	18,392	14.57 %
Fatehabad	4,60,592	46,209	18.62 %	**Shamsabad**	2,04,121	20,924	10.25 %
				Fatehabad	2,00,049	24,220	12.10 %
Kheragarh	4,66,809	46,063	18.57 %	**Jagner**	1,12,360	12,621	11.23 %
				Kheragarh	1,57,936	14,791	9.36 %
				Saiyan	1,63,468	17,606	10.77 %
				Akola	1,62,499	11,304	6.95 %
Kiraoli	5,06,777	37,988	15.30 %	**Fatehpur Sikri**	1,63,448	13,872	8.48 %
				Achhnera	1,95,269	15,815	8.09 %
Agra	21,86,655	35,187	14.17 %	**Bichpuri**	1,74,515	5,861	3.35 %
				Barauli Ahir	2,74,601	17,475	6.36 %
Etmadpur	3,67,441	28,002	11.28 %	**Khandauli**	1,84,644	14,152	7.66 %
				Etmadpur	1,60,900	13,661	8.49 %
Total	44,18,797	2,48,151	100 %	**Total**	25,49,413	2,36,125*	100 %

Source: Census 2011, Govt. of India

*: The number of cultivators may vary from Tehsil-wise to Block-wise

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